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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/579,866 | 05/25/2000 | Neal R Eisenberg | STL9-2000-0058 | 9640 |

24852 7590 04/19/2004

INTERNATIONAL BUSINESS MACHINES CORP
IP LAW
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SAN JOSE, CA 95141

EXAMINER

PANNALA, SATHYANARAYA R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2177

DATE MAILED: 04/19/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/579,866

Applicant(s)

EISENBERG ET AL.

Examiner

Sathyanarayan Pannala

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/30/2004 has been entered.

2. Claims 1, 7 and 13 are amended on the basis of Applicant's Amendment filed on 3/30/2004 (paper# 14). Now, the claims 1, 3-7, 9-13, 15-18 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3-7, 9-13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu et al. (US Patent 6,324,581) and in view of Schmuck et al. (US Patent 5,940,841).

5. As per independent claims 1, 7, 13, Xu rendered by the following:

"generating a request from a client on the local data processing system to the remote data processing system to open a foreign file in the foreign file system" at Fig. 2, col. 8, lines 47-49;

"opening of the of the foreign file by the foreign file system" at Fig. 3, col. 10, lines 14-16;

"sending of file attributes (interpreted attributes as part of metadata) of the foreign file, hereinafter foreign file attributes, to the local data processing system" at Fig. 3, col. 8, lines 57-59 and col. 10, lines 16-17;

"storing of the foreign file attributes (interpreted attributes as part of metadata) by the local data processing system" (it stores with the data mover and allows for access by the client) at Fig. 3, col. 10, lines 17-19;

"accessing of the foreign file attributes stored in the local data processing system by the local data processing system client to process the foreign file" at Fig. 3, col. 10, lines 12-14;

"processing by the local data processing system client the foreign file using the stored foreign file attributes" at Fig. 3, col. 10, lines 14-19.

"determining a subset of the foreign file attributes which are equivalent to a corresponding subset of tile attributes of the native file system, the subset of the foreign file attributes hereinafter known as conventional file attributes" at Fig. 2, col. 8, lines 47-59;

"returning the conventional file attributes to the client" at Fig. 3, col. 8, line 65 to col. 9, line 6;

Xu does not teach extended file attributes. However, Schmuck teaches "storing a remaining subset of the foreign file attributes which are not equivalent to a corresponding subset of file attributes of the native file system, the remaining subset of the foreign file attributes hereinafter known as extended file attributes" (at col. 10, lines 43-53). Thus, it would have been obvious to one ordinary skilled in the art at the time of the invention to extract extended file attributes from metadata in order to better access shared disk system. Xu teaches data mover computers control access to respective files systems in data storage whereas Schmuck teaches a shared disk file system on multiple computers. Xu and Schmuck references are combine as they teach shared disk access systems and to over come computers in network access to multiple disks in order to access any data all the time. Further, to support access control lists, extended file attributes are necessary (col. 3, lines 46-50).

6. As per dependent claims 3, 9, 15, Xu rendered by the following:

"accessing of the foreign file by the client via a protocol of the native file system, the accessing being performed in a similar manner to accessing a native file system file" at Fig. 1, 4-5, col. 14, lines 9-22;

Xu does not teach using extended file attributes for accessing foreign file.

However, Schmuck teaches "accessing of the foreign file by the client by use of the extended file attributes, the accessing being performed via a protocol different from the native tile system protocol" (at col. 27, lines 10-30). Thus, it would have been obvious to one ordinary skilled in the art at the time of the invention to extract extended file attributes from metadata in order to better access shared disk system.

7. As per dependent claim 4, 10, 16, Schmuck teaches the following:

"starting an expiration timer corresponding to the extended file attributes" at col. 29, line 36 to col. 30, line 37;

"removing the extended file attributes from the local data processing system storage after the expiration of tile expiration timer" at col. 30, lines 4-21.

8. As per dependent claims 5, 11, 17, Xu teaches "the sending of the foreign file attributes is performed by a web server located on the remote system, the web server being capable of sending and receiving messages via a network" at Fig. 1, 4-5, col. 13, lines 36-63.

9. As per dependent claims 6, 12, 18, Schmuck teaches the following:

"storing the extended file attributes in a shared memory portion of the local data

processing system storage which is accessible by the client and other local data processing system processes" at Fig. 2, col. 8, lines 47-59;

"associating a unique handle (interpreted unique handle as inode) with the extended file attributes" at col. 1, lines 30-34;

"providing the unique handle (interpreted unique handle as inode) to a local data processing system process to enable the local data processing system process to access the extended file attributes at col. 27, lines 31-62.

Response to Arguments

10. Applicants' arguments filed 3/30/2004 have been fully considered but they are not persuasive as described below:

A) Applicants stated as "Independent claims 1, 7, and 13 have been amended. Applicants therefore respectfully request that the Examiner reconsider and withdraw the 35USC 103(a) rejection of claims 1, 7, and 13."

In response to the applicants' argument, Examiner respectfully reconsidered all amendments to claims 1, 7 and 13. However, the prior art by Xu and Schmuck combined teaches all limitations of claims 1, 7 and 13. For example, claim 1 limitation "sending of file attributes of the foreign file, herein foreign file attributes (interpreted attributes as part of metadata), to the local data processing system." Xu do teach at Fig. 3, col. 8, lines 57-59 and col. 10, lines 16-17. Further, applicants' arguments fail to comply with 37 CFR 1.111(b)

because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

B) Applicants stated as "The Examiner's rejection of independent claims 1, 7, and 13 under USC 103(a) fails to establish a prima facie case of obviousness. Relative to the first criteria that there must be some suggestion or motivation to modify the reference or to combine..." see page 12, last paragraph.


In response to the applicants' argument, Examiner added the second motivation to support for combining two references. Xu teaches data mover computers control access to respective files systems in data storage whereas Schmuck teaches a shared disk file system on multiple computers. The second motivation is "to support access control lists, extended file attributes are necessary" (see Schmuck at col. 3, lines 46-50).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (703) 305-3390. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sathyanarayan Pannala
Examiner
Art Unit 2177

srp
April 16, 2004


GRETA ROBINSON
PRIMARY EXAMINER